### PROPERTY OF LOUIS D. BRANDEIS

## Financial and Operating Analyses

of

Annual Reports of Railways
to the
Interstate Commerce Commission

and

# Cost of Service Estimates

of Transporting Commodities in Carload Lots

For Use in Freight Rate Litigation

Prepared by

Jean Paul Muller

Accountant and Attorney at Law

402 Corcoran Building

Washington, D. C.

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The following list contains the names and addresses of prominent attorneys with whom J. P. Muller has been associated in important cases during the past two years and who are therefore best qualified to pronounce judgment on his work:

JOHN H. ATWOOD842 N. Y. Life Building, Kansas City, Mo.
Louis D. Brandeis
WADE H. ELLIS
CHALLEN B. ELLISUnion Trust Building, Cincinnati, O.
CHARLES M. JOHNSTON Henry W. Oliver Building, Pittsburgh, Pa.
RICHARD JONES, JRRepublic Building, Youngstown, O.
E. C. Morton
WILLIAM RAND, JR
JAS. H. WILKERSONU. S. Attorney, Chicago, Ill.
WILLIAM A. WIMBISH525 Grant Building, Atlanta, Ga.

### EXTRACTS FROM RECENT OPINIONS

and the same and the last properties have been added

OF THE

#### INTERSTATE COMMERCE COMMISSION

IN CASES WHERE

J. P. MULLER'S COST OF SERVICE ESTIMATES
ARE ON RECORD

I. & S. Docket Nos. 26, 26a, 26b, and 26c.

IN THE MATTER OF THE INVESTIGATION AND SUSPENSION OF ADVANCES IN RATES FOR THE TRANSPORTATION OF COAL BY THE C. & O. RY. Co., B. & O. R. R. Co., N. & W. Ry. Co., K. & M. Ry. Co., AND THEIR CONNECTIONS.

Increases denied C. & O. Ry. Co., B. & O. R. R. Co., K. &. M. Ry. Co., because of insufficient showing.

Increases granted to N. & W. Ry. Co.

Regarding Cost of Service Calculations the Commission here says:

"COST OF TRANSPORTING COAL.

"The Norfolk & Western seeks to establish the reasonableness of its proposed rates on lake-cargo coal upon this proposition, that such coal while paying all the transportation cost, its full share of maintenance and overhead charges, and all but \$13,000 of what it claims is its full share of interest upon bonded debt, does not meet the share properly allotable to it of dividend charges. How this is arrived at is to be found under the title 'N. & W.' of exhibit 10 in the appendix.

This road has for many years maintained a system similar to that which prevails upon the Santa Fe, of making a separation between passenger and freight traffic and alloting to each the separate and distinct charges applicable thereto. They keep these accounts of cost as to each of the divisions of the road extending from Norfolk, Va., on the east, to Columbus, Ohio, on the west. For the carriage of all freight they estimate that the cost per ton per mile is 2.28 mills on the line between Bluefield and Columbus, which consists of three divisions: The Pocahontas, the Kenova, and the Scioto. It is upon this Bluefield-Columbus line that this coal originates and over which it passes to the lakes. It will be noted that this rate of cost (2.28 mills per ton per mile) is the cost rate of all freight passing over this particular portion of the Norfolk & Western line. The question is at once raised, should

such a cost figure be applied to coal, when the fact is that 60 per cent only of the traffic moving over this line is coal, 20 per cent being coke and the remaining 20 per cent general merchandise, loading, respectively, 45, 32,2, and 17.35 tons per car. This coal traffic moves not only in large carloads but in train loads, and is subject to but one special charge of magnitude, namely, that of concentration, which charge, however, is included in the 2.28 mills per ton, the cost of moving all freight; and, inasmuch as on this particular division is gathered all the coal which moves over the Norfolk & Western system, whether eastward to Hampton Roads or westward to the middle west, the entire cost of concentrating appears as a special cost upon the traffic over the Bluefield-Columbus line. If, therefore, 2.28 mills is the average cost, including concentration, of all traffic over this particular line, it is manifest as to lake cargo coal it carries the charges for concentrating all coal and reflects also the great discrepancy which exists between the cost incident to the moving of coal and the commodities which are bulky and light, move in less quantity and in lighter loads, such as coke and general merchandise. We may, therefore, with certainty conclude that the cost of moving coal over the Norfolk & Western westward is less than 2.28 mills per ton per mile, taking the Norfolk & Western's figures themselves as entirely correct.

These, however, were not the only figures presented to the Commission. The coal companies which intervened in opposition to the increased rates made extended and elaborate investigations along the same lines, and supplementing these the Commission sought to check upon a practical basis the carriers' figures. Between all of these estimates of the cost of carrying lake-cargo coal there is less difference than might have been expected considering that some of the experts were frankly partisan and all had their individual theories as to the correct basis upon which such estimates should be made."

"Whichever method was followed, the figures resulting make it evident that is is not beyond the range of possibility to approximate the cost of carrying freight as distinguished from passengers over a certain division or even the carrying of a certain kind of freight when this constitutes a large proportion of a carrier's traffic over such division." Docket No. 3853.

JOHN W. BOILEAU ET AL.,

vs.

PITTSBURGH & LAKE ERIE R. R. Co. ET AL.

Rate reduced from 88c to 78c per ton and reduction made permanent for 2 years.

The Commission, in its opinion, says:

"In the West Virginia-Lake Coal case, supra, there were introduced in evidence by defendants not only data bearing upon the cost of transportation but equally extensive investigations were conducted at the instance of the Commission. The statistical compilations thus obtained show in great detail the assembling and other terminal costs connected with the transportation of lakecargo coal, as well as the line or movement expenses. In the instant case one comprehensive volume of 134 printed pages was introduced by a witness (J. P. Muller) for complainant, showing in careful detail the manner in which the various primary accounts had been treated, and what statistical processes had been subsequently resorted to in arriving at the cost of transporting lake-cargo coal over some of the defendants' lines. A witness for the interveners testified in much detail regarding the cost of assembling coal in the Pittsburgh district and related items based upon coal-company experience. The testimony of these two witnesses is mutually supplementary and throws much light upon the expense of transporting coal from the Pittsburgh district to Ashtabula. We have supplemented the analyses made by the various witnesses in these different coal cases by independent tests of our own."

"Taken all together these different statistical results point in the same direction and tend to show that the operating expense of transporting Pittsburgh coal to Ashtabula is probably less than one-half of the present rate of 88 cents."

"Every combination and analysis of figures which has been, and we believe can be, legitimately made, or with any degree of propriety applied, points unmistakably to a cost of transportation much too low to serve in the slightest degree to defend the 88-cent rate.

To be sure costs do not determine rates; yet most rates have within them as a constituent the element of cost. Cost is generally an important element in arriving at a judgment with respect to a rate. What weight shall be given to that element as compared with all the other elements entering into a particular rate, such as the value of the service, with its bundle of constituents, and the various conditions surrounding the particular traffic. is a matter to be decided in each individual case. Questions regarding the calculation of the cost of service and the weight to be given to such cost suggest controversies which are as old as the railway itself. As between the two cardinal principles of rate making—the cost of the service and the value of the service—the first is decidedly more capable of exact determination and mathematical expression than the latter. If, as some would have us believe, no measure has yet been discovered for ascertaining the cost of the service, what measure is there suggesting anything definite and tangible and sufficiently practical in its application to carry conviction which can be applied to the value of the service? By which, after all, we mean to say little more than that the cost of the service is ascertainable with much more precision and capable of more tangible expression than the value of the service. Nevertheless both cost and value must be considered as well as all other elements entering into a rate."

Docket Nos. 4274-4275.

New Pittsburgh Coal Co.
vs.
Hocking Valley Ry. Co.

Docket No. 4116.

PITTSBURGH VEIN OPERATORS ASS'N. OF OHIO.

vs.

Pennsylvania Company et al.

Docket No. 4116-1.

PITTSBURGH VEIN OPERATORS ASS'N. OF OHIO.

vs.

Wheeling & Lake Erie R. R. Co. et al.

Rate reduced by carriers after hearing from 85c. to 75c. per ton and reduced rate made permanent for 2 years.

The Commission here comments as follows:

"The evidence shows this rate of 85 cents to be too high. Following an extensive investigation, the complainant estimated the average cost of carrying lake-cargo coal over the Wheeling & Lake Erie lines for 146 miles from the mines to the vessel at 41.37 cents per net ton for the year 1910. The defendants contend that it is impracticable to ascertain the cost of operation in any particular branch of the railway business with sufficient accuracy to warrant the use of such figures as an element in determining the reasonableness of a rate.

The use of cost figures in arriving at a judgment with respect to a particular rate has been discussed from time to time in various earlier decisions of this Commission, and in somewhat greater detail very recently in the two important coal cases hereinbefore referred to, the West Virginia-Lake-Coal case and Boileau vs. P. & L. E. R. R. Co. We fully realize the limitations of all such calculations, but we also appreciate their intrinsic value. A

skillfully prepared brief filed by the respondents is devoted chiefly to showing the variations, inconsistencies and absurdities of all separation of expenses among the different branches of a carrier's business. It is relatively easy to turn diverse features and processes into ridicule, but such ridicule cannot destroy the value of the computations. The principle of costs so often recognized and emphasized by the Supreme Court of the United States is vital, even though its application is still subject to much improvement in certain details. A parallel illustration may be opportune. Who cannot point out the gravest inconsistencies, inequalities and absurdities in the practical operation of established rules of assessment and systems of taxation in almost any community? If no taxes were to be levied until exact justice can be arrived at through the application of fully perfected systems of assessment and taxation, all governments in every civilized country would cease for want of revenue. Cost accounting in the railway business is an exact science compared with assessment and taxation, yet no thoughtful citizen would suggest that no taxes shall be levied until after perfect rules of assessment and apportionment have been promulgated and put into operation. Analyses of operating expenses of railways have been and can be made with substantial accuracy, and whatever defects may still inhere in such processes do not negative the guiding value of the statistical results arrived at."

Cases pending, in which J. P. Muller's Cost of Service Exhibits are on record, before the Interstate Commerce Commission:

Docket No. 3854.

THE COKE PRODUCERS ASSOCIATION OF THE CONNELLSVILLE REGION vs.

THE BALTIMORE & OHIO RAILROAD COMPANY ET AL. "Coke Rates."

Docket No. 4606.

Youngstown Sheet & Tube Co. et al.

PITTSBURGH & LAKE ERIE RAILROAD COMPANY ET AL. "Coal Rates."

Docket No. 4607.

Youngstown Sheet & Tube Co. et al.

PITTSBURGH & LAKE ERIE RAILROAD COMPANY ET AL. "Coke Rates."

Docket No. 4608

Youngstown Sheet & Tube Co. et al.

Lake Shore & Michigan Southern Railway Company et al. "Iron Ore Rates."

Docket No. 4800.

SLOSS-SHEFFIELD STEEL & IRON CO. ET AL.

US.

LOUISVILLE & NASHVILLE RAILROAD COMPANY ET AL. "Pig Iron Rates."